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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,693	05/04/2001	Stephen Robert Tomassetti	69491	8188

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EXAMINER

BAROT, BHARAT

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,693

Applicant(s)

TOMASSETTI ET AL.

Examiner

Bharat N. Barot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

1. Claims 1-24 remain for further examination.

The old rejection maintained

2. Applicant's arguments and amendment with respect to claims 1-24 filed on May 11, 2005 have been fully considered but they are not deemed to be persuasive for the claims 1-24. The rejection is respectfully maintained as set forth in the last Office Action mailed on December 15, 2004.

Claim Rejections - 35 USC § 102(e)

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukunaga et al (U.S. Patent No. 6,775,020).

Fukunaga's patent discloses all the limitations for the claims 1-4 recited in the claimed invention.

5. Fukunaga teaches the invention as claimed including an asynchronous/isochronous bus transmission system (see abstract).

As to claim 1, Fukunaga teaches a control message structure for controlling communication between nodes on a peer-to-peer network, the control message structure comprising: a preamble for bus arbitration and priority determination (figure 21; column 4 line 64 to column 5 line 7; and column 13 lines 30-40, Fukunaga discloses a control structure having a preamble for bust arbitration); a destination address indicating a network address of a node to which a control message is being sent (column 4 lines 20-67, Fukunaga discloses that a packet includes a destination address header); a source address indicating a node as being a source of the message (column 15 lines 5-10, Fukunaga discloses that a packet includes a source address header field); a payload containing the message; and a checksum for checking whether the received message is valid (column 15 lines 1-10, Fukunaga discloses that a packet includes a data payload and a checksum for error checking).

As to claim 2, Fukunaga teaches the control message structure as in claim 1, the control message structure further comprising: payload size indicating a size of the message (column 15 line 9, Fukunaga discloses that a length code is present in packet).

As to claim 3, Fukunaga teaches the control message structure as in claim 2, wherein the preamble is a plurality of bytes of data (column 15 lines 1-60).

As to claim 4, Fukunaga teaches the control message structure as in claim 3, wherein each byte of the preamble contains one bit of a binary number pattern (columns 13-15).

Claim Rejections - 35 USC § 103(a)

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. Claims 5-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukunaga et al (U.S. Patent No. 6,775,020).
8. Fukunaga teaches the invention as claimed including an asynchronous/isochronous bus transmission system (see abstract).

As to claim 5, Fukunaga teaches the control message structure as in claim 4. Fukunaga does not explicitly teach the claimed limitation wherein the preamble is 10 bytes representing a 10-bit binary number. However, "Official Notice" is taken that the concept and advantages of employing 10 bytes representing a 10-bit binary number is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fukunaga by specifying an arbitrary desired number of bytes in the preamble. One would be motivated to do so to comply with the arbitration time, memory addressing scheme size, and the speed of the bus.

As to claim 6, Fukunaga teaches the control message structure of claim 1 above. Fukunaga fails to teach the limitation wherein each of the destination address and the source address is one byte wide.

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However, "Official Notice" is taken that the concept and advantages of employing 1 byte addressing scheme is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fukunaga by specifying 1 byte addressing scheme. One would be motivated to do so to comply with the arbitration time, memory addressing scheme size, and the speed of the bus.

As to claim 7, Fukunaga teaches the control message structure of claim 1. Fukunaga fails to teach the Limitation wherein the payload size is two bytes wide. However, "Official Notice" is taken that the concept and advantages of employing two bytes to represent a length of a payload and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fukunaga by specifying an arbitrary desired number of bytes in the to represent the payload. One would be motivated to do so to comply with the arbitration time, memory addressing scheme size, and the speed of the bus.

As to claim 8, Fukunaga teaches the control message structure of claim 1. Fukunaga does not explicitly teach that the check-sum is a twos compliment sum of the payload less the preamble and the checksum itself. However, "Official Notice" is taken that the concept and advantages of employing the check-sum as a twos compliment sum of the payload less the preamble and the checksum itself is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fukunaga by specifying the check-sum as a twos compliment sum of the

payload less the preamble and the checksum itself is old and well known in the art. One would be motivated to do so to process a fewer number of bits per packet.

As to claim 9, Fukunaga teaches method of controlling communication between nodes of a peer-to-peer network the method comprising the steps of monitoring activity on a control bus to determine when messages are being sent and to determine when the control bus is quiet and to determine the priority of each message being sent based, at least in part, on a preamble portion of each message (column 4 line 54 to column 5 line 7 and column 14 lines 55-60, Fukunaga discloses monitoring for the bus to become idle); analyzing header information to determine to which node a control message is directed to when said control bus is determined to be carrying control message information, the node to which said control message is directed being a receiving node (columns 14-16, Fukunaga discloses that packet fields are analyzed to determine the destination address and type of control packet); and analyzing the message from said control message, said control message being analyzed by said receiving node (columns 14-16).

Fukunaga does not explicitly teach that the packet is parsed. Fukunaga does teach that the packet fields are analyzed to determine the destination address and type of control packet (columns 14-16).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fukunaga by specifying the analyzing as a parsing step since the same functionality of scanning the packet for predefined data is achieved.

As to claim 10, Fukunaga teaches the method as in claim 9, wherein monitoring activity on the control bus further comprises monitoring a control bus active signal (columns 12-14).

As to claim 11, Fukunaga teaches the method of claim 10 above, wherein the act of analyzing comprises retrieving a preamble, a destination address, a source address, and a message size (column 15 lines 1-10).

As to claim 12, Fukunaga teaches the method as in claim 11, wherein when the control bus active signal is asserted, said method further comprises the step of: monitoring the preamble to determine if other nodes are in contention for the control bus (columns 8-13):

As to claim 13, Fukunaga teaches the method of claim 9 above, wherein in the monitoring step when said control bus is determined to be quiet, said method further comprises the steps of: sending a preamble; monitoring transmission of said preamble to determine if a collision has occurred, sending a balance of said message when a collision is determined not to have occurred; and releasing said control bus after the message has been sent and monitoring the bus (columns 11-13).

As to claim 14, Fukunaga teaches the method as in claim 13, wherein the step of sending said message comprises sending a destination address, a source address, a payload size, a payload, and a checksum (column 15 lines 1-10).

Claims 15-19 and 21-24 do not teach or define any new limitations above claims 1-14 and therefore are rejected for similar reasons.

As to claim 20, Fukunaga teaches the method as in claim 19, wherein a second address is reserved for a broadcast feature (columns 13-16).

Fukunaga fails to teach that said address is reserved for a conference/intercom function, only a conference feature node being able to acquire the address reserved for the conference/intercom function.

However, "Official Notice" is taken that the concept and advantages of reserving an address for a conference/intercom function, only a conference feature node being able to acquire the address reserved for said conference/intercom function is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fukunaga by specifying an address for a conference/intercom function. One would be motivated to do so to provide a centralized conference management functionality and since the Fukunaga reference suggests that the bus system is used for audio video data transfers.

Response to Arguments

9. Applicant's arguments with respect to claims 1-24 filed on May 11, 2005 have been fully considered but they are not deemed to be persuasive for the claims 1-24.

10. In the remarks, the applicant argues that:

(A) Argument: Fukunaga et al do not show or suggest a control message structure (data packet) including a preamble for bus arbitration and priority determination, as required by claim 1; and monitoring activity on a control bus to determine the priority of each message being sent based, at least in part, on a preamble portion of each message, as required by claim 9.

Response: Fukunaga et al disclose a control message structure (data packet) including a preamble for bus arbitration (figure 21; and column 14 line 50 to column 15 line 3) and priority determination (figure 2, and column 4 line 64 to column 5 line 7), as required by claim 1; and also teach that monitoring activity on a control bus to determine the priority of each message being sent based, at least in part, on a preamble portion of each message (figure 2; and column 4 line 54 to column 5 line 7), as required by claim 9.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bharat Barot** whose Telephone Number is **(571) 272-3979**. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number **(571) 273-8300**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Saleh Najjar**, can be reached at **(571) 272-4006**.

Bharat Barot.
BHARAT BAROT
PRIMARY EXAMINER

Patent Examiner Bharat Barot

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July 26, 2005